

KITAERU

Kitaeru Company

Contributing to these SDGs



Tetsuo Kondo

Managing Executive Officer and Kitaeru Company President

Profile

Tetsuo Kondo took on the role of Kitaeru Company President in April 2021.



Value for society

The Kitaeru Company is contributing to a diverse mobility society in the low-carbon age through the evolution of highly efficient manufacturing processes integrating steel materials, forging and machining while focusing on the basic performance requirements of cars, which are running, turning and stopping.

Examples of Aichi Steel's forged products



Business fields

- Main products: Hot/warm/cold-forged specialty steel products, machined products, etc.
- Main applications: Automobile engine components, gear, transmission, and driveline components, BEV electric axle components, etc.

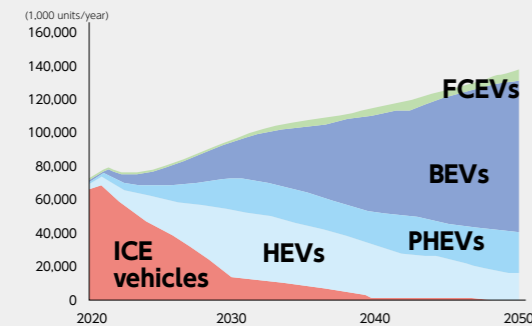
Company strengths

- Outstanding technical capabilities in steel type development, steel material manufacturing, and forging, refined through integrated forging with steel making processes
- Extensive collective strengths in everything from steel materials to forging and machining, offering a total solution to meet the increasingly diverse needs of customers
- Strong partnerships with automakers

Business environment

In the automotive industry, where Aichi Steel's major customers are, there is a serious shift toward electrified vehicles, in Europe, North America, and China in particular, due to an acceleration of the transition toward a decarbonized society. On the other hand, various issues are materializing with this shift, including development of the electric power infrastructure and restrictions on the supply of scarce resources required for batteries. For this reason, the Kitaeru Company expects decarbonization of automobiles to proceed according to a multi-pathway strategy tailored to the particular needs and circumstances of each region, with choices including not only BEVs, but internal combustion engine options (internal combustion engine (ICE)-only, hybrid electric vehicles (HEVs), plug-in hybrid electric vehicles (PHEVs), etc.) and FCEVs. With demand for automobiles expected to gradually expand in emerging countries in particular, we expect demand for forged products to also be maintained or to grow moderately.

Global sales composition of new automobile sales (passenger vehicles)



Medium- to long-term growth strategies

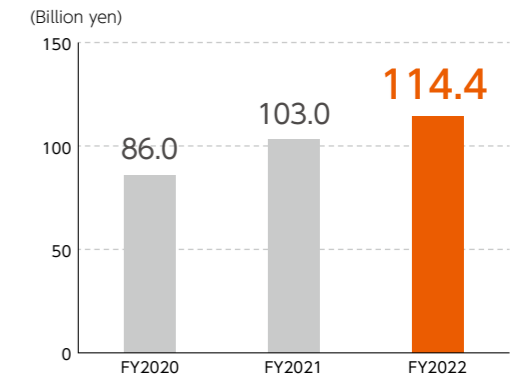
To respond flexibly to a continually changing business environment, we are implementing the following four priority issues of our medium- to long-term strategy, with a focus on electrification and a low-carbon society.

Priority issues	Initiatives
Evolution into a finished product manufacturer	Directly reflect in products the changes in vehicle performance requirements associated with electrification, and provide high-precision machined products designed for the future mobility society
New product development	Focus on product development for a low-carbon society, and develop and expand sales of more environment-friendly products for electrified vehicles
Building of small lot multi-product production structures	Strengthen earnings capacity, by establishing production technologies and developing production structures that are not tied to the past, to address the diversity of an ever-expanding mobility society
Enhancement of global consolidation	Transfer technologies from Japan, developed alongside electrification, to overseas subsidiaries, and expand sales and business overseas by leveraging competitiveness in quality, cost, and delivery

Fiscal 2022 Business Performance

Despite some regions still being impacted by issues such as production restrictions due to the COVID-19 pandemic and unstable automobile production due to semiconductor shortages, steady demand supported an increase in sales volumes of forged products for the Kitaeru Company. Increased sales overseas in particular contributed to growth in net sales. Steep rises in the price of materials and energy had the effect of suppressing earnings, and while profits were lower year-on-year, we managed to achieve profitability.

Net sales

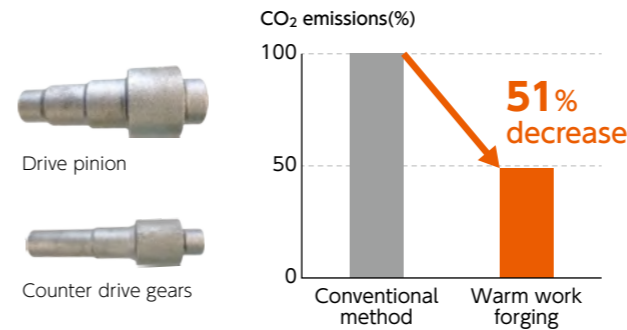


Achievements and Future Initiatives

Domestic business

Working to achieve a low-carbon society

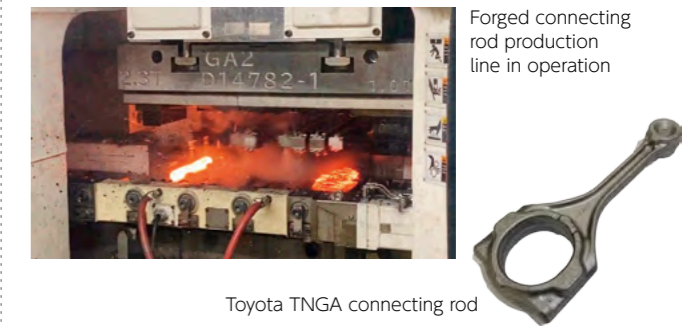
As one of the Kitaeru Company's activities to achieve a low-carbon society, it is changing its manufacturing method from hot work forging to warm work forging. Lowering the heating temperature and eliminating the need for the heat treatment process has enabled us to reduce energy consumption and reduce CO₂ emissions by 51% compared to the conventional method. In fiscal 2022, we adopted this manufacturing method in the production process of HEV drive pinions, one of our main products. We are gradually expanding the scope of products manufactured through warm work forging to increase product competitiveness through improved environmental performance. As an example, we are currently working to apply the method to electric axle components (drive pinions and counter drive gears), for which we expect demand will grow in the future.



Overseas business

Contributing to ever-better cars and passing on skills

With the trend toward more compact engines, the Kitaeru Company needed to reduce the weight and increase the strength of connecting rods, one of its main products. To meet these needs, we are replacing conventional sintered products with forged products. In 2022, we launched a forging production line at our subsidiary Aichi Forge USA, Inc. (AFU), which is the only supplier of forged products to the Toyota Group in North America. By transferring Toyota manufacturing technologies and merging the knowledge and skills developed through the manufacture of sintered connecting rods, we are not only contributing to reduced weight and increased strength of these products, but to higher production efficiency and increased profits for our overseas business as well.



Group company initiatives

Enhanced global competitiveness of forged products

With growth of the automotive industry and increased demand for specialty steel in the ASEAN region, Aichi Steel made a capital participation in India's Vardhman Special Steels as part of efforts to increase profits for its overseas business. In the past, each of our forging sites in the ASEAN region used steel material manufactured by our plants in Japan. However, to strengthen our competitiveness, we are building and switching to supply structures from India to expand our overseas forged product business. Going forward, we will continue to enhance our supply structures to lift earnings capacity and become more resilient.

Enhancing competitiveness of forged products in the ASEAN region

